THE IRON TRADE IN SCOTLAND AND ABROAD.—Messrs. Ferguson and Rhind's annual circular shows that, as compared with 1848, the product and stock of pig-iron in Scotland are 92,000 and 95,000 tons respectively in excess, while the entire shipments are 14,858 tons less, being 153,183 tons to foreign ports, and 221,943 tons coastwise in 1849, against 162,151 tons foreign, and 227,833 tons coastwise in 1848; and present the fact that, notwithstanding the extreme depression in the iron trade generally, and the falling off in shipments and diminished consumption for malleable iron purposes in Scotland this year, the increase of stock has been little more than commensurate with the extra production since 31st December, 1848. It therefore follows, say they, that our local and interior requirements must have improved to the extent of the above decrease in the items of shipments and malleable iron. Last week, they observe, business [in pig iron] was more active, and the current value had advanced to 47s. to 47s. 6d. mixed nos.: and 48s. No. 1, prompt cash, f.o.b., with 1s. to 1s. 6d. extra on three months open contracts. A steady, though not active business, has been transacted in manufactured iron, which has ruled between 5*l*. 10s. and 6*l*. 10s. for merchant bars. The year 1850 promises to be a prosperous one to the iron and forgemasters of Liege, Charleroi, Seraing, Verviers, &c., and to the zinc establishments of the Grande Montagne, &c. The reduction on the import duties on Belgian iron, zinc, coals, &c., into France, will cause activity, not only in the working in every branch, but also to the railway transit.

MURRAY'S COMPENSATING BALL LEVER.—The object of the invention registered by Mr. Murray is to obviate the inconveniences attending the old ball taps in cisterns, such as occasionally finding no water in the cistern, perhaps when they most want it; and, again, occasionally too great a supply when the ball remains down; and if the cistern is in the upper part of the house, the ceilings and carpets are spoiled. It consists of a ball divided into two chambers, one above the other. The top chamber is air-tight, to act as a permanent float; the lower has a small opening close under the division, for the admission of water or air, either to form a weight or a float. Thus, when the ball is up, and the supply shut off, the lower chamber will be full of water to exert the power of a weight equal to 3 lbs. (in the case of a ball 6 inches diameter) on the end of the lever to turn on the service, being 2 lbs. more than the ordinary ball would have; then suppose the water-level in the cistern to fall below the ball when in a vertical position, the water would run out, and it would regain the whole buoyancy of an ordinary ball of that size.

AYLESBURY PARISH CHURCH.—The inhabitants of Aylesbury have commenced the repairs of the ancient parish church of that town. The church is an ancient cruciform structure, in the Decorated style of architecture, with some earlier portions, and a low central tower. The western entrance is very rich, and on the north side of the chancel is a chantry chapel formerly used as a vestry room, in which are still remaining some traces of Norman character. The door of this chapel is very ancient, opening by means of a latch key in the centre, which turns a strong iron bar that drops into two staples. It was opened by means of a hole hewn in the door, sufficiently large to admit of an arm; the sacramental plate and wine were kept in this small room, and in all probability were pillaged by the Parliamentary forces when stationed in Aylesbury. A lancet arch door, with dog tooth carving, has been brought to light by the good taste of the respected vicar, the Rev. John Prettyman. Most of the pillars of the south aisle have declined from the perpendicular, although the arches above them are in no way disturbed, with the exception of the eastern arch, which helps to support the tower. It is decided to prop up the tower and introduce new columns. The architect employed is Mr. Scott.—J. D. K.

NIAGARA SUSPENSION BRIDGE.—The present structure rests on wooden towers 50 feet high, over which pass 14 cables,—5 of 36 wires each,—5 of 72,—1 of 125,—and 3 of 150; in all 1,115 wires, capable of bearing nearly 1,000 tons weight. A railway structure to supersede it is spoken of.

CHANTREY ON THE NELSON COLUMN.—Chantrey, according to Mr. George Jones's "Recollections of his Life," was often requested to recommend able artificers; and in such cases he made his friends' interest his own. "He was always consulted by the heads of the Government on the propriety of public testimonials; among others he was desired to send his opinion as to the propriety of erecting a column, with a statue on the top, to the memory of Lord Nelson; he seriously and reasonably objected to a column, for a column ought to be part of a building, or if it be used as a monument, it should be treated as a biographical volume, with the acts of a hero sculptured on the shaft of the pillar on the capital of which he stands, similar to those of Trajan and Antoninus. Chantrey also wished to see the useful united with the commemorative, and would have preferred an architectural edifice, adapted to accommodate (with dwellings rent-free) the veteran officers of the navy, and the site adorned by a fine statue of Nelson, forming altogether a memorial worthy of the hero, and indicative of the gratitude, generosity, and benevolence of the nation."

THE SMALL-POX AND VACCINATION HOSPITAL, at Highgate-hill, which we illustrated fully some time since, is now nearly ready for occupation. Various alterations were made in the original design; the frontage was lessened 70 feet, and brought to 218 feet, and the height was lowered 2 feet. The balustrade in front is omitted, and the ventilation shaft postponed. The whole cost, including a lodge, and laying out the ground, we are told, will, nevertheless, be about 20,000*l*. The accommodation provided is for 70 patients. The acute wards, on the one-pair floor, are very spacious apartments with windows at back, over the corridor, as well as in front, for thorough ventilation. The walls of these are rendered with Parian cement. The elevation is plain and unpretending in execution (more so than our drawing gave the notion of); it is faced with stock bricks, and has Bath stone dressings; the porch is of Portland stone. The hall is laid with Orsi and Armani's metallic lava, in an ornamental pattern, and the lower corridor with the same material of one colour.

VIEW OF MAIDSTONE CHURCH AS PROPOSED TO BE RESTORED.—A lithograph of the interior of the Collegiate Church of All Saints at Maidstone "restored to the date of its completion," has been published by Mr. J. Whichcord, jun., architect. It includes the rood screen polychromed "and the rood." The screen is continued round one of the bays of the north aisle to communicate with the rood staircase, which still exists. This screen probably enclosed the chapel of St. Mary (of which mention is made in old documents), and there exists a niche, which formerly it is said, held her image. The pulpit is placed on the north side. When we last saw Maidstone Church, it was in a miserable plight, and we shall gladly hear of endeavours to obtain a proper restoration of it. If Mr. Whichcord's drawing is published with the view of leading to this, he was unwise to put in the "rood," as it is calculated to increase the opposition of that portion of the community who connect the restoration of churches with the restoration of popery. Maidstone Church and College were commenced by William Courtney, Archbishop of Canterbury, in 1395, on the site of an old hospital founded there in 1260. The style is Perpendicular.

THE THOROUGHFARE, FENCHURCH-STREET.—A correspondent draws our attention to the delay there is in effecting the long-contemplated opening through the tower of St. Benet's Church, at the south-west corner of Fenchurch-street, London, and which would enable the authorities to throw part of the present paths into the road and so improve the thoroughfare. At a recent vestry of the united parishes of St. Benet and St. Leonard, Eastcheap, we understand Mr. l'Anson's design for this undertaking was submitted and approved, and it was decided, that so soon as the necessary arrangements were completed, the work should be proceeded with.

OLYMPIC THEATRE.—In Mrs. Mowatt's excellent comedy "Fashion," produced here on Wednesday last, with considerable success, there is a scene displaying a conservatory, which is very cleverly managed.

PROJECTED WORKS.—Advertisements have been issued for tenders by 15th inst., for 100 sets of wrought-iron wheels and axles for the Great Northern Railway Company; by 1st February, for additions and restorations to St. Margaret's Church, Canterbury; by same date, for the works of Wolverhampton Exchange; by same date, for the erection of the new church of St. Gregory, Canterbury; by 11th February, for the erection of the Training Institution for Females at Derby; by 16th inst., for the erection of a building in the poorhouse-yard, Southampton; by 4th February, for about 3,000 tons rolled rails at the port of Lubeck; and by a date not specified, for the erection of a cottage, barn, stable, and other farming conveniences, at Mashwood, Droitwich.

GAS EXPLOSION.—At Bath-street, Glasgow, from the supposed subsidence of a street vault and consequent fracture of a pipe, leading, we presume, to a street lamp, the vault was filled with gas, and a candle being carelessly carried into it, notwithstanding the full and timeous warning which the gas itself had previously given throughout the neighbourhood, an explosion took place, and two men were dangerously injured, and several houses damaged. It is strange that, notwithstanding our long experience of the nature as well as the utility of gas, so many still tamper with it as no child of the least experience would with that equally useful and obedient servant, but most dangerous master—the fire. It is earnestly to be hoped that we are now, as a nation, rapidly outgrowing this childish inadvertence,—that the nature and properties of gas will soon be as universally known and heeded as are those of the fuel out of which it springs,—and that the time is close at hand when even the poorest and most ignorant of the people would as soon be without the fire that cooks their food as the light that is so well adapted to illuminate and cheer their dwellings.

THE MUD HILLS IN THE CLAPHAM-ROAD.—As your valuable journal is an advocate for order relating to buildings, and as roads and streets are so intimately connected therewith, I wish to draw the attention of the public to the very disgraceful practice of collecting the mud, and loading the footpaths of such roads as the Clapham, Brixton, and many others in that locality, with the scraping of those roads, and there leaving it sometimes for a week, or longer time, and sometimes two crops heaped one over the other, as at the present time. The said mud (instead of being carted away to some proper place the moment it is scraped to the side of the road, as in London streets) is deposited on the footpath until a customer may happen to require any for building purposes. So that, in fact, the said road is nothing more or less than a *road-sand grinding establishment*, and the depôt on *the public footpath*, where it is placed for sale, and if the sale should be slack, which it is at this season of the year, the footway is encumbered to a scandalous degree, so much so, that the mud heaps are 4 feet wide, or more; and these are thickly interspersed with large gravel heaps, very unsightly, and also very dangerous in a dark night, as a person has no right to expect to come in contact with either a heap of mud or gravel, on a regular footpath. Men are daily employed scraping away at the roads; but the footpaths are seldom or ever repaired; and when they are, they are never done properly—that is, gravelled and made with a proper incline for the water to run off; but we often see them made as flat as a table. This reminds me of Trafalgar-square, which, in wet weather, is a regular pond. Is it not surprising that they cannot lay a pavement proper for the water to flow off, simple as it is.—R. M.

ELECTRO-TELEGRAPHIC PROGRESS.—A new telegraph company has been formed, under the names of Howse, Brett, and Wilmer, who, it is said, are to introduce their form of telegraph into various countries,—Mr. Howse, an American, into the United States; Mr. Brett, over the Continent; and Mr. Wilmer, in this country. The recent trial from London to Norwich was made on this principle of telegraph. The operator plays on keys like those of a pianoforte, each key printing a capital letter on the paper at the other terminus of the wire. The instrument is described as a tell-tale and self-acting printing machine or copyist.

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